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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,547	03/26/2004	Patrick Thompson	2316.926USRE	9367
23552	7590	07/22/2005	EXAMINER	
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			CONNELLY CUSHWA, MICHELLE R	
			ART UNIT	PAPER NUMBER
			2874	
DATE MAILED: 07/22/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/810,547

Applicant(s)

THOMPSON ET AL.

Examiner

Michelle R. Connelly-Cushwa

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 17-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,4-10 and 12-16 is/are rejected.
- 7) ☒ Claim(s) 2,3 and 11 is/are objected to.
- 8) ☒ Claim(s) 1-34 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Reissue Application

The present application is a reissue of United States Patent No. 6,363,200 B1, which issued on March 26, 2002, and which matured for United States Patent Application No. 09/689,989.

Election/Restrictions

Newly submitted claims 17-34 are directed to inventions that are independent or distinct from the invention originally claimed for the following reasons:

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-16, drawn to a connection module, classified in class 385, subclass 135.
- II. Claims 17-23, drawn to a method of optically connecting two optic cables, classified in class 385, subclass 135.
- III. Claims 24-34, drawn to an optical fiber distribution frame apparatus and a method of assembling an optical fiber distribution frame, classified in class 385, subclass 134.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by another

Art Unit: 2874

and materially different process, for instance, the connection module as claimed does not necessarily require two optical fibers to be spliced (see claim 1), and when a splice is present, a preassembled optical fiber splice may be inserted into the connection module, as opposed to splicing the fibers together after routing one through the module.

Inventions I and III are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as a connection module for use alone or in distribution frames/cabinets that do not contain storage modules and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Inventions II and III are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product or method is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate method is deemed to be useful as a method for

Art Unit: 2874

assembling a connection module for use alone or in distribution frames/cabinets that do not contain storage modules and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Because these inventions are distinct for the reasons given above and the search required for Groups II and III is not required for Group I, restriction for examination purposes as indicated is proper.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 17-34 have been withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Oath/Declaration

The reissue oath/declaration filed with this application is acceptable under 37 CFR §1.63 and 37 CFR §1.175 as specific changes, differences from original claims or amendments to the claims are identified with the reissue oath/declaration.

Drawings

Twenty-one (21) sheets of formal drawings were filed on March 26, 2004 and have been accepted by the Examiner.

Specification

Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Petrunia (US 5,212,761).

Regarding claim 1; Petrunia discloses a connection module (10) in Figures 1 and 2, the connection module (10) comprising:

- a housing including
 - o a front (16, 17),
 - o two mounting flanges (the mounting flanges extend from the tops and bottoms of front panels 16 and 17, wherein push fasteners 34 are located in holes in the mounting flanges),
 - o a rear of the housing spaced apart from the front (the rear of the housing is the curved wall of the module);

Art Unit: 2874

- o a top (13) spaced apart from a bottom (15), the top and bottom spaced apart from the mounting flanges, and
 - o opposed spaced apart sides (11, 12);
- a plurality of connection locations having exposed openings along the front (connectors, 20 and 30, are located at the plurality of connection locations);
- the bottom, the rear, and the opposed sides defining a cable notch region (the cable notch region is channel 14), wherein the cable notch region defines an opening (port 40) for receiving a first cable (21); and
- a cable clamp (22) extending from the rear (the rear is defined by the curved wall and the cable clamp (22) extends towards the front from the rear of the module) in the cable notch region (the Examiner notes that "the cable notch region" is a broad term that includes the region within and surrounding the cable notch).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-10 and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pertrunia (US 5,212,761).

Regarding claims 4-6; In the embodiment illustrated by Pertrunia in Figures 1 and 2, the connection locations include a plurality of adapters, and a first cable (21) is connected to the housing by the clamp (22), and interior cables are optically connected to the adapters. Pertrunia does not specifically state that the interior cables are optically connected to a splice/coupler/splitter and that a splice/coupler/splitter is optically connected to the first cable, however, Pertrunia further teaches that splice trays, optical splitters and other components could be provided within the housing as needed (see column 4, lines 10-13). Therefore, one of ordinary skill in the art would have found it obvious to incorporate a splice or splitter in the modules disclosed by Pertrunia, wherein the interior cables are optically connected to the splice or splitter and the splice or splitter is optically connected to the first cable, as suggested by Pertrunia, in order to maintain optical connections between the adapters and the cable as desired, including replacing broken and/or damaged portions of optical fiber on the interior of the module and appropriately dividing/combining optical signals as needed. Splices and splitters are optical couplers.

Regarding claim 7; Pertrunia suggests all of the limitations of claim 7 as discussed above, except for specifically stating that the optical coupler/splitter is a wavelength division multiplexer. Wavelength division multiplexers are well known splitters/combiners in the art. One of ordinary skill in the art would have found it obvious to incorporate a wavelength division multiplexer, as the splitter suggested by Pertrunia, in the invention of Pertrunia in order to split the optical signals as desired, since

Art Unit: 2874

wavelength division multiplexers are well known optical splitters and Pertrunia teaches that splitters may be incorporated.

Regarding claims 8 and 9; Pertrunia suggests all of the limitations of claims 8 and 9, as applied above, except for specifically teaching that a splice is located between the first cable and a splitter/wavelength division multiplexer. Since Pertrunia suggests that splice trays, optical splitters and other components could be provided within the housing as needed (see column 4, lines 10-13), one of ordinary skill in the art would have found it obvious to use any combination of these elements as needed. Therefore, one of ordinary skill in the art would have found it obvious to incorporate a splice between the first cable and a splitter in the invention Pertrunia in order to maintain optical connections between the splitter and the cable as desired, including replacing broken and/or damaged portions of optical fiber on the interior of the module and appropriately dividing/combining optical signals as needed. As discussed with respect to claim 7, wavelength division multiplexers are well known splitters and one of ordinary skill in the art would have found it obvious to incorporate a wavelength division multiplexer as the splitter suggested by Pertrunia in the invention of Pertrunia.

Regarding claims 10 and 14; Pertrunia discloses a connection module (10) in Figures 1 and 2, the connection module (10) comprising:

- a housing including
 - o a front portion (16, 17),
 - o a rear portion spaced apart from the front (the rear of the housing is the curved wall of the module);

Art Unit: 2874

- a plurality of connection locations having exposed openings disposed in the front portion (connectors, 20 and 30, are located at the plurality of connection locations);
- a lower portion (bottom, 15) having an opening, the opening sized to receive a fiber optic cable (21);
- wherein a fiber optical cable (21) is physically connected to the housing of the module by a clamp (22) and interior cables are optically connected between the fiber optic cable and the connection locations;
- wherein adapters are positioned at the connection locations, the interior cables being connected to the adapters.

Pertrunia does not specifically disclose an embodiment including a splicing component disposed at least partially between the connection locations and the rear portion, the splicing component configured to optically connect a fiber optical cable that is connected to the module to interior cables that are optically connected between the splicing component and the connection locations. However, Pertrunia further teaches that splice trays, optical splitters and other components could be provided within the housing as needed (see column 4, lines 10-13). Therefore, one of ordinary skill in the art would have found it obvious to incorporate a splicing component in the module disclosed by Pertrunia, wherein the interior cables are optically connected to the splicing component and the splicing component is optically connected to the first cable, as suggested by Pertrunia, in order to maintain optical connections as desired, including

Art Unit: 2874

replacing broken and/or damaged portions of optical fiber on the interior of the module and appropriately dividing/combining optical signals as needed.

Regarding claim 12; the connection module further includes a surface (the front surface, 16 and 17) having a mounting locations (the mounting locations includes push fasteners, 34), the mounting locations adapted to removably mount the housing to a frame (see Figure 4).

Regarding claims 13 and 15; the splicing component comprises a splice, and the splice would be inherently be disposed between the front and rear portions when the splice is incorporated within the housing as suggested by Pertrunia.

Regarding claim 16; the invention of Pertrunia comprises a cable attachment member (22) that is adapted to attach a fiber optic cable (21) to the housing.

Allowable Subject Matter

Claims 2, 3 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art cited on attached form PTO-892 is the most relevant prior art known, however, the invention of claims 2, 3 and 11 distinguishes over the prior art of record for the following reasons.

Regarding claims 2 and 3; the claims are allowable over the prior art of record because none of the references either alone or in combination disclose or render obvious a connection module as defined in claim 2, wherein the adapters are positioned

Art Unit: 2874

at an angle having a component angle in the direction of the bottom of the housing in combination with the other limitations of claim 2. Claim 3 depends from claim 2.

Regarding claim 11; the claim is allowable over the prior art of record because none of the references either alone or in combination disclose or render obvious a connection module as defined in claim 11, wherein the adapters are positioned at an angle having a first component angle that is in the direction of the rear portion to the front portion and a second component angle that is in the direction of the lower portion in combination with the other limitations of claim 11.

Pertrunia (US 5,212,761) is the closest prior art of record and the adapters are positioned parallel to the bottom of the housing and, thus, do not have a component angle in the direction of the bottom of the housing. It would not have been obvious to position the adapters at an angle having a component angle in the direction of the bottom of the housing in Pertrunia, since such an arrangement would require the dimensions of the module to be larger to accommodate the same number of adapters, since portions of the adapters would be slanted up or down, or since less adapters would fit in a module having the same dimensions.

Hence, there is no reason or motivation for one of ordinary skill in the art to use the prior art of record to make the invention of claims 2, 3 and 11.

Conclusion

Any inquiry concerning the merits of this communication should be directed to Examiner Michelle R. Connelly-Cushwa at telephone number (571) 272-2345. The examiner can normally be reached 9:00 AM to 7:00 PM, Monday-Thursday.

Art Unit: 2874

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney B. Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general or clerical nature should be directed to the Technology Center 2800 receptionist at telephone number (571) 272-1562.

Michelle R. Connelly-Cushwa

Michelle R. Connelly-Cushwa
Patent Examiner
July 12, 2005